ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

Air Quality Division

1110 W. Washington Street ● Phoenix, AZ 85007 ● Phone: (602) 771-2316

SIGNIFICANT PERMIT REVISION TO AIR QUALITY CONTROL **PERMIT**

(As required by Title 49, Chapter 3, Article 2, Section 49-426, Arizona Revised Statutes)

This air quality control permit does not relieve applicant of responsibility for meeting all air pollution regulations

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SIGNIFICANT PERMIT REVISION DESCRIPTION

This significant permit revision authorizes Eurofresh, Inc. to add a new site; Site #6 to their existing Operating Permit #27099 previously modified by Significant Revision #s 31941 and 36094. The new site will have three boilers rated at nominally 40.41 MMBtu/hr (Maximum Burner input capacity) each and two internal combustion engines (ICEs) rated at 1528 HP each. In order to stay below the major source threshold, the Permittee is voluntarily accepting a facility wide cap on the natural gas consumption in all boilers and Hp-hr cap on all ICEs. Facility wide natural gas consumption for the boilers at all six sites will be limited to 1558.5 MMScf per year on a rolling twelve month total basis. Further the Permittee will not operate all the internal combustion engines for more than 3,453,080 hp-hr on rolling 12- month total basis.

FACILITY -WIDE EMISSIONS

Pollutant	Emission, tons per year		
Nitrogen Oxides, NO _x	90		
Carbon monoxide, CO	10.01		
Sulfur Dioxide, SO ₂	11.64		
Particulate matter below 10 micron, PM ₁₀	7.13		
Volatile organic compounds, VOC	5.50		

This change meets all the requirements for a significant permit revision outlined in A.A.C. R-18-2-320.

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ATTACHMENT "B"

Addenda (Significant Revision #37370) to Operating Permit No. 27099 (As revised by Significant Revision #s 31941 and 36094) for Eurofresh, Inc.

This significant permit revision #37370 issued to Eurofresh, Inc. permits the setting up of a new site, Site #6, having three boilers rated at nominally 40.41 MMScf per hour (Maximum Burner input capacity) each and two ICEs rated at 1528 HP each.

Condition III, Attachment "B" of Operating Permit #27099, Significant Revision #s 31941 and 36094 shall be replaced with the following:

III. BOILERS

A. Applicability

[40 CFR § 60.40c]

This section is applicable to all of the boilers identified in Attachment "C".

B. Fuel

- 1. Permitted Fuel and Limitation [A.A.C. R18-2-306.A.2, -306.01.A, and -331.A.3.a] [Material Permit Conditions are identified by italics and underlines]
 - a. <u>The Permittee shall not cause, allow or permit the firing of any fuel other</u> than pipeline quality natural gas in the boilers.
 - b. <u>The Permittee shall not burn more than 1558.5 MMScf natural gas in any rolling 12-month period basis cumulative for all eighteen boilers.</u>

2. Notification

[40 CFR § 60.48.c.(a)]

- a. The Permittee shall submit notification of the date construction of boilers in Site #6 is commenced postmarked no later than 30 days after such date, as provided by 40 CFR 60.7(a)(1), to the Director. This requirement shall not apply in case the boilers are purchased in completed form.
- b. The Permittee shall submit a notification of the actual date of initial start up of boilers in Site #6 postmarked within 15 days after such date, as provided by 40 CFR 60.7(a)(3), to the Director.
- c. Above notification shall include the design heat capacity of the boilers and identification of the fuels to be combusted in the boilers.

3. Monitoring, Reporting & Record Keeping Requirements

[Material Permit Conditions are identified by italics and underlines]

a. <u>The Permittee shall install, calibrate, maintain</u>, and operate <u>gas flow</u> <u>meter(s)</u>, <u>one for each boiler, that continuously monitor and record the</u> amount of natural gas combusted each day.

[A.A.C. R18-2-331.c, 40 CFR § 60.48c(g)]

- b. The Permittee shall calculate and record the daily natural gas used in each of the boilers of the facility. [40 CFR § 60.48c(g), A.A.C. R18-2-306.A3.c]
- c. On a monthly basis, the Permittee shall calculate and record the 12-month rolling total of natural gas used in boilers of the facility to show compliance with Condition III.B.1.b above. [A.A.C. R18-2-306.A3.c]
- d. The Permittee shall submit to the Director reports required under III.B for each six month period. The reports shall be post marked by the 30th day following the end of reporting period. [40 CFR § 60.48.c.(j)]

4. Permit Shield

[A.A.C. R18-2-325]

Compliance with the conditions of this Section shall be deemed compliance with $40 \text{ CFR} \S 60.40c(a)$, $\S 60.48c(a)(1)$, $\S 60.48c(a)(3)$, $\S 60.48c(g)$, $\S 60.48c(j)$.

C. Nitrogen Oxides (NO_x)

1. Emission Limitations/Standards

[A.A.C. R18-2-306.01]

[Material Permit Conditions are identified by italics and underlines]

The Permittee shall not cause, allow, or permit the emission of NO_x to exceed 62.32 pounds per million standard cubic feet of natural gas fired in the boilers.

- 2. Air Pollution Control Equipment [A.A.C. R 18-2-306.A.2 and -331.A.3.e] [Material Permit Conditions are identified by italics and underlines]
 - a. At all times including periods of start up, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate Low NO_x Burners on the boilers in a manner consistent with good air pollution control practice for minimizing NO_x emissions.
 - b. <u>The Permittee shall fine tune the low NO_x burners of all the boilers to reduce NO_x emissions by end of year 2006. Fine tuning shall be carried out by Zantingh b.v.</u>
 - c. Subsequent tuning of burners shall be conducted in the event that the performance test as per condition III.C.4 yields an emission factor greater than the one stated in III.C.1 above.

3. Monitoring, Reporting & Record Keeping Requirements

The Permittee shall keep records of the date and details of the low NO_x burner tuning that is conducted. [A.A.C. R18-2-306.A3.c]

4. Performance Testing Requirement

[A.A.C. R18-2-312]

- a. Within 180 days of the fine tuning, the Permittee shall conduct performance tests on one boiler at each of the six sites to determine compliance with the limits specified in III.C.1 above.
- b. Annually thereafter, the Permittee shall test one boiler from each site. The boiler to be tested shall be chosen by the Director at the time that a performance test plan is submitted.
- c. The Permittee shall use EPA Reference Method 7 or 7E to determine NO_x emissions.

Condition IV, Attachment "B" of Operating Permit #27099 and Significant Revision #s 31941 shall be replaced with the following:

IV. Internal Combustion Engines

A. Applicability

This Section is applicable to each of the internal combustion engines identified in Attachment "C".

B. Operational Limitations

[A.A.C. R18-2-306.01 and 331.A.3.a]

[Material permit conditions are indicated by underline and italics]

1. Fuel Limitation

The Permittee shall only use diesel fuel in the internal combustion engines.

2. Hours of Operation

The Permittee shall not operate the internal combustion engines for more than 3,453,080 hp-hr in any rolling 12-month period.

[A.A.C. R18-2-306.01 and 331.A.3.a]

3. Monitoring & Recordkeeping

The Permittee shall record the monthly operating hp-hr at the close of each month for each of the generators and calculate a rolling twelve month hp-hr total for the ICEs. For purposes of this recordkeeping requirement, the Permittee shall assume that the ICEs are being run at full capacity. Records of operating hours can be maintained using the hour meters provided on the ICEs.

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C. Particulate Matter and Opacity

1. Emissions Limitations and Standards

[A.A.C. R18-2-719.C.1]

a. The Permittee shall not cause, allow or permit the emission of particulate matter, caused by combustion of fuel, from any stationary rotating machinery into the atmosphere in excess of the amounts calculated by the following equation:

 $E = 1.02 O^{0.769}$

Where

- E = the maximum allowable particulate emission rate in poundsmass per hour
- Q = the heat input in million Btu per hour
- b. For purposes of this Section, the heat input shall be the aggregate heat content of all fuels whose products of combustion pass through a stack or other outlet. The total heat input of all operating fuel-burning units on a plant or premises shall be used for determining the maximum allowable amount of particulate matter which may be emitted. [A.A.C. R18-2-719.B]
- c. Opacity
 - i. The Permittee shall not cause, allow or permit to be emitted into the atmosphere from any stationary rotating machinery, smoke for any period greater than 10 consecutive seconds which exceeds 40% opacity. [A.A.C. R18-2-719.E]
 - ii. Visible emissions when starting cold equipment shall be exempt from this requirement for the first 10 minutes. [A.A.C. R18-2-719.E]
- 2. Monitoring, Reporting, and Recordkeeping

[A.A.C. R18-2-306.A.3.c]

- a. The Permittee shall keep records of fuel supplier certifications to demonstrate compliance with the PM limit specified in Condition IV.C.1.a. The certification shall contain information regarding the name of fuel supplier and lower heating value of the fuel. These records shall be made available to ADEQ upon request.
- b. A certified EPA Reference Method 9 observer shall conduct a monthly survey of visible emissions emanating from the stack of the IC engines if in operation. If the opacity of the emissions observed appears to exceed the standard, the observer shall conduct a certified EPA Reference Method 9 observation. The Permittee shall keep records of the initial survey and any EPA Reference Method 9 observations performed.

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c. If the observation results in a Method 9 opacity reading in excess of 40%, the Permittee shall report this to ADEQ as excess emission and initiate appropriate corrective action to reduce the opacity below 40%. The Permittee shall keep a record of the corrective action performed.

3. Permit Shield

[A.A.C. R18-2-325]

Compliance with this Part shall be deemed compliance with A.A.C. R18-2-719.C.1 and A.A.C. R18-2-719.E.

D. Sulfur Dioxide

1. Emission Limitations and Standards

[A.A.C. R18-2-306.A.2 & -719.F]

The Permittee shall not cause, allow or permit firing of any fuel other than low sulfur (sulfur content shall not exceed 0.9% by weight) diesel fuel in the internal combustion engines. The Permittee shall not emit or cause to emit more than 1.0 pound of sulfur dioxide per million Btu.

- 2. Monitoring, Recordkeeping, and Reporting
 - a. The Permittee shall keep daily records of the fuel used, sulfur content and lower heating value of the fuel being fired in the internal combustion engine. The Permittee shall keep records of fuel supplier certifications to demonstrate compliance with the sulfur content limit specified in this Condition IV.D.1. The certification shall contain the sulfur content of the fuel and the method used to determine the sulfur content of the fuel. These records shall be made available to ADEQ upon request.

[A.A.C. R18-2-306.A.3.c and -719.I]

b. The Permittee shall report to the Director any daily period during which the sulfur content of the fuel being fired in the internal combustion engine exceeds 0.8%. [A.A.C. R18-2-719.J]

3. Permit Shield

[A.A.C. R18-2-325]

Compliance with this Part shall be deemed compliance with A.A.C. R18-2-719.F, A.A.C. R18-2-719.I, and A.A.C. R18-2-719.J.

Equipment List, Attachment "C" of Operating Permit #27099 and Significant Revision #31941 shall be replaced with the following:

EQUIPMENT LIST

Site #	Equipment Type	Maximum Burner Input Capacity/HP	Make	Model	Equipment Number	Date of Manufacture
1.	Boiler 1	38.47 MMBtu/hr	Danstoker	Nilus	E92-1196-2	1992
	Boiler 2	39.88 MMBtu/hr	Danstoker	Nilus	E92-1196-1	1992
	Boiler 3	41.28 MMBtu/hr	Danstoker	Nilus	E92-2239-2	1996
	ICE 1	827 HP	Perkins	3000	SGC120229 V1642F	1992
	ICE 2	1193 HP	Mitsubishi	S12H-PTA	30075	1999
	Boiler 1	41.74 MMBtu/hr	Crone	CW-285	971532	1997
	Boiler 2	35.87 MMBtu/hr	Crone	CW-285	971533	1997
2.	Boiler 3	41.25 MMBtu/hr	Crone	CW-285	971531	1997
	ICE 1	1623 HP	Anglo Belgian	6EDZC- 900-166-A	12915	2005
	ICE 2	1623 HP	Anglo Belgian	6EDZC- 900-166-A	12913	2005
	Boiler 1	38.93 MMBtu/hr	Crone	CW-285	9912.538	1999
	Boiler 2	41.04 MMBtu/hr	Crone	CW-285	9912.536	1999
3.	Boiler 3	41.25 MMBtu/hr	Crone	CW-285	9912.537	1999
	ICE 1	1623 HP	Anglo Belgian	6EDZC- 900-166-A	12916	2005
	ICE 2	1623 HP	Anglo Belgian	6EDZC- 900-166-A	12914	2005
	Boiler 1	41.28 MMBtu/hr	Danstoker	Nilus	E96-2239-1	1996
	Boiler 2	39.88 MMBtu/hr	Danstoker	TVB 15	22-6919-2	2003
4.	Boiler 3	38.47 MMBtu/hr	Danstoker	TVB 15	22-6919-1	2003
	ICE 1	1193 HP	Mitsubishi	S12H-PTA	30074	1999
	ICE 2	1448 HP	Mitsubishi	S12R-PTA	10702	1999

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Site #	Equipment Type	Maximum Burner Input Capacity/HP	Make	Model	Equipment Number	Date of Manufacture
	Boiler 1	40.41 MMBtu/hr	Van Dijk	HWR-116	38	2005
	Boiler 2	40.41 MMBtu/hr	Van Dijk	HWR-116	36	2005
5.	Boiler 3	40.41 MMBtu/hr	Van Dijk	HWR-116	37	2005
	ICE 1	1528 HP	Mitsubishi	S12R-PTA	D 0018	2005
	ICE 2	1528 HP	Mitsubishi	S12R-PTA	D 0017	2005
	Boiler 1	40.41 MMBtu/hr	Van Dijk	HWR 16	42	TBD
6.	Boiler 2	40.41 MMBtu/hr	Van Dijk	HWR 16	43	TBD
	Boiler 3	40.41 MMBtu/hr	Van Dijk	HWR 16	44	TBD
	ICE 1	1528 HP	Mitsubishi	S12R-PTA	TBD	TBD
	ICE 2	1528 HP	Mitsubishi	S12R-PTA	TBD	TBD